

Claims

We claim:

1. A feeding and picking device for feeding and picking a standing agricultural crop wherein individual plants in the crop are provided with plant stalks, the device comprising a rotating feeding element that is rotated about a vertical axis, the rotating feeding element grasps plant stalks and directs the plant stalks to a picking device which separates useable parts from plant stalks, wherein rotating feeding element is designed to transport the plant throughout the effective length of the picking device.

2. A feeding and picking device for feeding and picking a standing agricultural crop wherein individual plants in the crop are provided with plant stalks, the device comprising a rotating feeding element that is rotated about a vertical axis, the rotating feeding element grasps plant stalks and directs the plant stalks to a picking device which separates useable parts from plant stalks, wherein the feeding device is designed to support the plant stalk while it is being processed by the picking device.

3. A feeding and picking device as defined by claim 1 wherein the picking device is provided with a snapping channel, the feeding device covers the snapping channel.

4. A feeding and picking device as defined by claim 3 wherein the rotating feeding element is provided with number of fingers, gaps are formed between the fingers, the gaps are designed to grasp plant stalks, the gaps are sufficiently deep to ensure that they pass over the snapping channel as the feeding element.

5. A feeding and picking device as defined by claim 4 wherein the device is provided with two rotating feeding elements, an upper feeding element and a lower feeding element, the upper feeding element has a direction of rotation, the upper feeding element is provided with fingers that are curved away from the direction of rotation.

6. A feeding and picking device as defined by claim 5 wherein the lower feeding element is located beneath an upper feeding element.

7. A feeding and picking device as defined by claim 6 wherein the lower feeding element has a direction of rotation that is identical to the direction of rotation of the upper feeding element.

8. A feeding and picking device as defined by claim 7 wherein the lower feeding element is provided with fingers that are curved towards the direction of rotation.

9. A feeding and picking device as defined by claim 8 wherein the picking device is mounted on the side of the feeding device.

10. A feeding and picking device as defined by claim 9 wherein the picking device is provided with an inlet, the inlet being located in front of the vertical axis of the feeding

device.

11. A feeding and picking device as defined by claim 10 wherein the lower feeding element has a lower element diameter and the upper feeding element has an upper element diameter, the lower element diameter is smaller than the upper element diameter.

12. A feeding and picking device as defined by claim 10 wherein the lower feeding element has a lower element diameter and the upper feeding element has an upper element diameter, the lower element diameter is equal to the upper element diameter.

13. A feeding and picking device as defined by 10 claim wherein the lower feeding element is provided with a lower vertical axis and the upper feeding element is provided with an upper vertical axis, the lower vertical axis and the upper vertical axis are coaxial.

14. A feeding and picking device as defined by 10 claim wherein the lower feeding element is provided with a lower vertical axis and the upper feeding element is provided with an upper vertical axis, the lower vertical axis is shifted forward with respect to the upper vertical axis.

15. A feeding and picking device as defined by claim 10 wherein the upper feeding element has the same number of fingers as the lower feeding element.

16. A feeding and picking device as defined by claim 10 wherein the upper feeding element has fewer fingers than the lower feeding element.

17. A feeding and picking device as defined by claim 10 wherein the picking device further comprises a snapping bar and at least one snapping roll, the at least one snapping roll extends parallel to the snapping channel and is mounted under said snapping bar.

18. The feeding and picking device as defined by claim 17 wherein said feeding and picking device has a direction of travel, the snapping channel extends parallel to the direction of travel.

19. The feeding and picking device as defined by claim 17 wherein said feeding and picking device has a direction of travel, the snapping channel extends at an angle to the direction of travel.

20. A crop harvesting machine having at least two feeding and picking devices, wherein each feeding and picking device feeds and picks a standing agricultural crop wherein individual plants in the crop are provided with plant stalks, the device comprising a rotating feeding element that is rotated about a vertical axis, the rotating feeding element grasps plant stalks and directs the plant stalks to a picking device which separates useable parts from plant stalks, wherein the rotating feeding element is designed to transport the plant throughout the effective length of the picking device.

21. A crop harvesting machine as defined by claim 20 having a symmetrical line,

feeding and picking devices are symmetrically arranged with respect to each other about the symmetrical line.

Abstract of the Disclosure

5 A feeding and picking device having a rotating feeding device that is rotated about a vertical axis. The device is able to work in fields not planted in rows and is designed to grasp plant stalks and feed them into a picking device. The picking device comprises a snapping channel formed by snapping bars under which is located at least one snapping roll. The feeding device comprises a disc having fingers that overlap the snapping channel. The feeding device is therefore designed to transport the plant throughout the effective length of
10 the picking device.